

SEP 09 2002

TECH CENTER 1600/2900

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.  
14730

In Re Application Of: Tracy ANN Willson, et al.

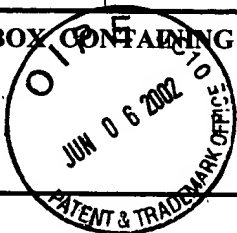
Serial No.  
09/868,813

Filing Date  
June 21, 2001

Examiner  
Unassigned

Group Art Unit  
Unassigned

Title: SOCS-BOX CONTAINING PEPTIDES



**Payment of Fee**

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

- ☐ A check in the amount of \_\_\_\_\_ is attached.
- ☒ The Assistant Commissioner is hereby authorized to charge and credit Deposit Account No. 19-1013/SSMP as described below. A duplicate copy of this sheet is enclosed.
- ☐ Charge the amount of \_\_\_\_\_
- ☒ Credit any overpayment.
- ☒ Charge any additional fee required.

**Certificate of Transmission by Facsimile\***

I certify that this document and authorization to charge deposit account is being facsimile transmitted to the United States Patent and Trademark Office (Fax. No. \_\_\_\_\_)

on \_\_\_\_\_  
(Date)

Signature

Typed or Printed Name of Person Signing Certificate

**Certificate of Mailing by First Class Mail**

I certify that this document and fee is being deposited on June 3, 2002 with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Signature of Person Mailing Correspondence

Michelle Mustafa

Typed or Printed Name of Person Mailing Correspondence

\*This certificate may only be used if paying by deposit account.

Signature

Dated: June 3, 2002

Frank S. DiGiglio, Reg. No. 31,346  
SCULLY, SCOTT, MURPHY & PRESSER  
400 Garden City Plaza  
Garden City, NY 11530  
(516) 742-4343

FSD:ahs

cc:

# TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.  
14730

In Re Application Of: Tracy ANN Willson, et al.

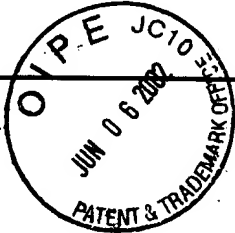
Serial No.  
09/868,813

Filing Date  
June 21, 2001

Examiner  
Unassigned

Group Art Unit  
Unassigned

Title: SOCS-BOX CONTAINING PEPTIDES



Address to:

Assistant Commissioner for Patents  
Washington, D.C. 20231

## 37 CFR 1.97(b)

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application; within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or before the mailing date of a first Office Action on the merits, whichever event occurs last.

## 37 CFR 1.97(c)

2. ☐ The Information Disclosure Statement submitted herewith is being filed after three months of the filing of a national application, or the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or after the mailing date of a first Office Action on the merits, whichever occurred last but before the mailing date of either:

1. a Final Action under 37 CFR 1.113, or
  2. a Notice of Allowance under 37 CFR 1.311,
- whichever occurs first.

Also submitted herewith is:

- ☐ a certification as specified in 37 CFR 1.97(e);

OR

- ☐ the fee set forth in 37 CFR 1.17(p) for submission of an Information Disclosure Statement under 37 CFR 1.97(c).



RECEIVED

SEP 09 2002

TECH CENTER 1600/2900  
PATENTS**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE****Applicants:** Tracy Ann Willson, et al.**Examiner:** Unassigned**Serial No.:** 09/868,813**Art Unit:** Unassigned**Filing Date:** June 21, 2001**Docket:** 14730**For:** SOCS-BOX CONTAINING PEPTIDES**Date:** June 3, 2002Assistant Commissioner for Patents  
Washington, D.C. 20231**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Sir:

In accordance with 37 C.F.R. §§ 1.97 and 1.98, it is requested that the following references, which are also listed on the attached Form PTO-1449, be made of record in the above-identified case.

1. Robyn Star, et al. (1997) "A Family of Cytokine-inducible Inhibitors of Signalling", NATURE, Vol. 387: 917-921;
2. Douglas J. Hilton, et al. (1998) "Twenty Proteins Containing a C-terminal SOCS Box Form Five Structural Classes", Proc. Natl. Acad. Sci., USA, Vol. 95: 114-119;
3. Akihiko Yoshimura, et al. (1995) "A Novel Cytokine-inducible Gene CIS encodes an SH2-Containing Protein that Binds to Tyrosine-phosphorylated Interleukin 3 and Erythropoietin Receptors", The EMBO Journal, Vol. 14, no. 12: 2816-2826;

---

**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8(a)**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, DC 20231 on June 3, 2002.

**Dated:** June 3, 2002  
Michelle Mustafa

4. Takaho A. Endo, et al. (1997) "A New Protein Containing an SH2 Domain that Inhibits JAK Kinases", NATURE, Vol. 387, No. 26: 921-924;
5. Tetsuji Naka, et al. (1997) "Structure and Function of a New STAT-induced STAT Inhibitor", NATURE, Vol. 387, No. 26: 924-929;
6. Masaaki Masuhara, et al. (1997) "Cloning and Characterization of Novel CIS Family Genes", BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, Vol. 239: 439-446;
7. Seijiro Minamoto, et al. (1997) "Cloning and Functional Analysis of New Members of STAT Induced STAT Inhibitor (SSI) Family: SSI-2 and SSI-3", BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, Vol. 237: 79-83;
8. Masashi Narazaki, et al. (1998) "Three Distinct Domains of SSI-1/SOCS-1/JAB Protein are Required for its Suppression of Interleukin 6 Signaling", Proc. Natl. Acad. Sci USA, Vol. 95: 13130-13134'
9. Donald B. Smith, et al. (1988) "Single-Step Purification of Polypeptides Expressed in *Escherichia coli* as Fusions with Glutathione S-Transferase", Elsevier Science Publishers B.V. (Biochemical Division), Vol. 67: 31-40;
10. Robert L. Moritz, et al. (1996) "S-Pyridylethylation of Intact Polyacrylamide Gels and in situ Digestion of Electrophoretically Separated Proteins: A Rapid Mass Spectrometric Method for Identifying Cysteine-Containing Peptides", Electrophoresis, Vol. 17: 907-917;
11. Robert L. Moritz, et al. (1994) "Capillary HPLC: A Method for Protein Isolation and Peptide Mapping", METHODS: A Companion to Methods in Enzymology, Vol. 6: 213-226;
12. Lisa M. Zugaro, et al., (1998) "Characterization of Rat Brain Stathmin Isoforms by Two-Dimensional Gel Electrophoresis-matrix Assisted Laser Desorption/Ionization and Electrospray Ionization-ion Trap Mass Spectrometry", Electrophoresis, Vol. 19: 867-876;
13. Jimmy K. Eng, et al., (1994) "An Approach to Correlate Tandem Mass Spectral Data of Peptides with Amino Acid Sequences in a Protein Database", J Am. Soc. Mass Spectrum, Vol. 5: 976-989;
14. Martina Schnolzer, et al. (1992) "In situ Neutralization in Boc-Chemistry Solid Phase Peptide Synthesis", Int. J. Peptide Protein Res., Vol. 0: 1-15;
15. William G. Kaelin, Jr. (1998) "The VHL Tumour-Suppressor Gene Paradigm", TIG, Vol. 14, No. 10: 423-426;

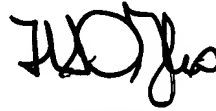
16. Joan W. Conaway, et al. (1998) "The Elongin BC Complex and the Von Hippel-Lindau Tumor Suppressor Protein", *Biochimica et Biophysica Acta* 1377: M49-M54;
17. Karla P. Garrett, et al. (1995) "Positive Regulation of General Transcription Factor SIII by a Tailed Ubiquitin Homolog", *Proc. Natl. Acad. Sci. USA*, Vol. 92: 7172-7176;
18. Kim M. Lonergan, et al. (1998) "Regulation of Hypoxia-Inducible mRNAs by the von Hippel-Lindau Tumor Suppressor Protein Requires Binding to Complexes Containing Elongins B/C and C<sub>12</sub>", *Molecular and Cellular Biology*, p. 732-741;
19. Cherylene Schaubert, et al. (1998) "Rad23 Links DNA Repair to the Ubiquitin/Proteasome Pathway", *Nature*, Vol. 391: 715-718;
20. D. Roxanne Duan, et al. (1995) "Inhibition of Transcription Elongation by the VHL Tumor Suppressor Protein", *Science*, Vol. 269: 1402-1406;
21. Adam Kibel, et al. (1995) "Binding of the von Hippel-Landau Tumor Suppressor Protein to Elongin B and C", *Science*, Vol. 269: 1444-1446;
22. Arnim Pause, et al. (1997) "The von Hippel-Landau Tumor-Suppressor Gene Product Forms a Stable Complex with Human CUL-2, a Member of the Cdc53 Family of Proteins", *Proc. Natl. Acad. Sci., USA*, Vol. 94: 2156-2161;
23. Takeshi Kishida, et al. (1995) "Cellular Proteins that Bind the von Hippel-Lindau Disease Gene Product: Mapping of Binding Domains and the Effect of Missense Mutations", *Cancer Research*, Vol. 55: 4544-4548;
24. Avram Hershko, et al. (1998) "The Ubiquitin System", *Annu. Rev. Biochem.*, Vol. 67: 425-479;
25. Frederique Verdier, et al. (1998) "Proteasomes Regulate Erythropoietin Receptor and Signal Transducer and Activator of Transcription 5 (STAT5) Activation", *The Journal of Biological Chemistry*, Vol. 273, No. 43: 28185-28190;
26. Chao-Lan Yu, et al. (1997) "Involvement of Proteasomes in Regulating Jak-STAT Pathways Upon Interleukin-2 Stimulation", *The Journal of Biological Chemistry*, Vol. 272, No. 22: 14017-14020; and
27. Jennifer Terrell, et al. (1998) "A Function for Monoubiquitination in the Internalization of a G Protein-Coupled Receptor", *Molecular Cell*, Vol. 1: 193-202.

Applicants are submitting copies of the above-cited references.

Inasmuch as this Information Disclosure Statement is being submitted in accordance with the schedule set out in 37 C.F.R. § 1.97(b), no statement or fee is required

Consideration and acceptance of this Supplemental Information Disclosure Statement is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'F. DiGiglio'.

Frank S. DiGiglio  
Registration No. 31,346

Scully, Scott, Murphy & Presser  
400 Garden City Plaza  
Garden City, New York 11530  
(516) 742-4343  
FSD:ahs

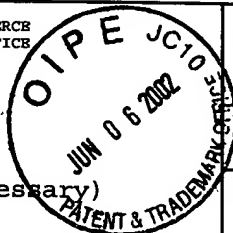
SEP 09 2002

TECH. CENTER 1600/2900

Sheet 1 of 3

Form PTO-1449  
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE**LIST OF PRIOR ART  
CITED BY APPLICANT**

(Use several sheets if necessary)

Atty. Docket No.  
14730Serial No.  
09/868,813Applicant  
Tracy Ann Willson, et al.Filing Date  
June 21, 2001Group  
Unassigned**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL*	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (if appropriate)
AA						
AB						
AC						
AD						

**FOREIGN PATENT DOCUMENTS**

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
					YES	NO

**OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

1	Robyn Star, et al. (1997) "A Family of Cytokine-inducible Inhibitors of Signalling", NATURE, Vol. 387: 917-921
2	Douglas J. Hilton, et al. (1998) "Twenty Proteins Containing a C-terminal SOCS Box Form Five Structural Classes", Proc. Natl. Acad. Sci., USA, Vol. 95: 114-119
3	Akihiko Yoshimura, et al. (1995) "A Novel Cytokine-inducible Gene CIS encodes an SH2-Containing Protein that Binds to Tyrosine-phosphorylated Interleukin 3 and Erythropoietin Receptors", The EMBO Journal, Vol. 14, no. 12: 2816-2826
4	Takahiro A. Endo, et al. (1997) "A New Protein Containing an SH2 Domain that Inhibits JAK Kinases", NATURE, Vol. 387, No. 26: 921-924
5	Tetsuji Naka, et al. (1997) "Structure and Function of a New STAT-induced STAT Inhibitor", NATURE, Vol. 387, No. 26: 924-929
6	Masaaki Masuhara, et al. (1997) "Cloning and Characterization of Novel CIS Family Genes", BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, Vol. 239: 439-446
7	Seiichi Minamoto, et al. (1997) "Cloning and Functional Analysis of New Members of STAT Induced STAT Inhibitor (SSI) Family: SSI-2 and SSI-3", BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, Vol. 237: 79-83
8	Masashi Narazaki, et al. (1998) "Three Distinct Domains of SSI-1/SOCS-1/JAB Protein are Required for its Suppression of Interleukin 6 Signaling", Proc. Natl. Acad. Sci USA, Vol. 95: 13130-13134
9	Donald B. Smith, et al. (1988) "Single-Step Purification of Polypeptides Expressed in <i>Escherichia coli</i> as Fusions with Glutathione S-Transferase", Elsevier Science Publishers B.V. (Biochemical Division), Vol. 67: 31-40
10	Robert L. Moritz, et al. (1996) "S-Pyridylethylation of Intact Polyacrylamide Gels and in situ Digestion of Electrophoretically Separated Proteins: A Rapid Mass Spectrometric Method for Identifying Cysteine-Containing Peptides", Electrophoresis, Vol. 17: 907-917

EXAMINER

DATE CONSIDERED

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449  
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEAtty. Docket No.  
14730Serial No.  
09/868,813

RECEIVED

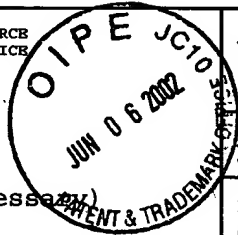
SEP 09 2002

LIST OF PRIOR ART  
CITED BY APPLICANT

(Use several sheets if necessary)

Applicant  
Tracy Ann Willson, et al.Filing Date  
June 21, 2001Group  
Unassigned

TECH CENTER 1600/2900



## U.S. PATENT DOCUMENTS

EXAMINER INITIAL*	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (if appropriate)
AA						
AB						
AC						
AD						

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

11	Robert L. Moritz, et al. (1994) "Capillary HPLC: A Method for Protein Isolation and Peptide Mapping", METHODS: A Companion to Methods in Enzymology", Vol. 6: 213-226
12	Lisa M. Zugaro, et al., (1998) "Characterization of Rat Brain Stathmin Isoforms by Two-Dimensional Gel Electrophoresis-matrix Assisted Laser Desorption/Ionization and Electrospray Ionization-ion Trap Mass Spectrometry", Electrophoresis, Vol. 19: 867-876
13	Jimmy K. Eng, et al., (1994) "An Approach to Correlate Tandem Mass Spectral Data of Peptides with Amino Acid Sequences in a Protein Database", J Am. Soc. Mass Spectrum, Vol. 5: 976-989
14	Martina Schnolzer, et al. (1992) "In situ Neutralization in Boc-Chemistry Solid Phase Peptide Synthesis", Int. J. Peptide Protein Res., Vol. 0: 1-15
15	William G. Kaelin, Jr. (1998) "The VHL Tumour-Suppressor Gene Paradigm", TIG, Vol. 14, No. 10: 423-426
16	Joan W. Conaway, et al. (1998) "The Elongin BC Complex and the Von Hippel-Lindau Tumor Suppressor Protein", Biochimica et Biophysica Acta 1377: M49-M54
17	Karla P. Garrett, et al. (1995) "Positive Regulation of General Transcription Factor SIII by a Tailed Ubiquitin Homolog", Proc. Natl. Acad. Sci. USA, Vol. 92: 7172-7176
18	Kim M. Lonergan, et al. (1998) "Regulation of Hypoxia-Inducible mRNAs by the von Hippel-Lindau Tumor Suppressor Protein Requires Binding to Complexes Containing Elongins B/C and Cui2", Molecular and Cellular Biology, p. 732-741
19	Cherylene Schaubert, et al. (1998) "Rad23 Links DNA Repair to the Ubiquitin/Proteasome Pathway", Nature, Vol. 391: 715-718
20	D. Roxanne Duan, et al. (1995) "Inhibition of Transcription Elongation by the VHL Tumor Suppressor Protein", Science, Vol. 269: 1402-1406

EXAMINER

DATE CONSIDERED

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609, draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



SEP 09 2002

Sheet 1 of 3

TECH CENTER 1600/2900

Form PTO-1449 (REV. 7-80)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		Atty. Docket No. 14730		Serial No. 09/868,813	
<b>LIST OF PRIOR ART CITED BY APPLICANT</b>  (Use several sheets if necessary)				Applicant Tracy Ann Willson, et al.			
				Filing Date June 21, 2001		Group Unassigned	
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL*		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (if appropriate)
	AA						
	AB						
	AC						
	AD						
<b>FOREIGN PATENT DOCUMENTS</b>							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
							YES NO
<b>OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
	21	Adam Kibel, et al. (1995) "Binding of the von Hippel-Landau Tumor Suppressor Protein to Elongin B and C", Science, Vol. 269: 1444-1446					
	22	Arnim Pause, et al. (1997) "The von Hippel-Landau Tumor-Suppressor Gene Product Forms a Stable Complex with Human CUL-2, a Member of the Cdc53 Family of Proteins", Proc. Natl. Acad. Sci., USA, Vol. 94: 2156-2161					
	23	Takeshi Kishida, et al. (1995) "Cellular Proteins that Bind the von Hippel-Lindau Disease Gene Product: Mapping of Binding Domains and the Effect of Missense Mutations", Cancer Research, Vol. 55: 4544-4548					
	24	Avram Herskho, et al. (1998) "The Ubiquitin System", Annu. Rev. Biochem., Vol. 67: 425-479					
	25	Frederique Verdier, et al. (1998) "Proteasomes Regulate Erythropoietin Receptor and Signal Transducer and Activator of Transcription 5 (STAT5) Activation", The Journal of Biological Chemistry, Vol. 273, No. 43: 28185-28190					
	26	Chao-Lan Yu, et al. (1997) "Involvement of Proteasomes in Regulating Jak-STAT Pathways Upon Interleukin-2 Stimulation", The Journal of Biological Chemistry, Vol. 272, No. 22: 14017-14020					
	27	Jennifer Terrell, et al. (1998) "A Function for Monoubiquitination in the Internalization of a G Protein-Coupled Receptor", Molecular Cell, Vol. 1: 193-202					
EXAMINER				DATE CONSIDERED			
* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.  
14730

In Re Application Of: Tracy ANN Willson, et al.

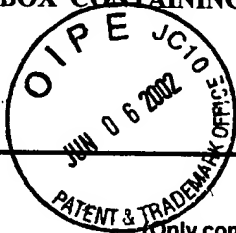
Serial No.  
09/868,813

Filing Date  
June 21, 2001

Examiner  
Unassigned

Group Art Unit  
Unassigned

Title: SOCS-BOX CONTAINING PEPTIDES



**Payment of Fee**

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

- ☐ A check in the amount of \_\_\_\_\_ is attached.
- ☒ The Assistant Commissioner is hereby authorized to charge and credit Deposit Account No. 19-1013/SSMP as described below. A duplicate copy of this sheet is enclosed.
- ☐ Charge the amount of \_\_\_\_\_
- ☒ Credit any overpayment.
- ☒ Charge any additional fee required.

**Certificate of Transmission by Facsimile\***

I certify that this document and authorization to charge deposit account is being facsimile transmitted to the United States Patent and Trademark Office (Fax. No. \_\_\_\_\_)

on \_\_\_\_\_  
(Date)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Typed or Printed Name of Person Signing Certificate

**Certificate of Mailing by First Class Mail**

I certify that this document and fee is being deposited on June 3, 2002 with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

\_\_\_\_\_  
Signature of Person Mailing Correspondence

Michelle Mustafa

\_\_\_\_\_  
Typed or Printed Name of Person Mailing Correspondence

\*This certificate may only be used if paying by deposit account.

  
Signature

Dated: June 3, 2002

Frank S. DiGiglio, Reg. No. 31,346  
SCULLY, SCOTT, MURPHY & PRESSER  
400 Garden City Plaza  
Garden City, NY 11530  
(516) 742-4343

FSD:ahs

CC:

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.  
14730

In Re Application Of: Tracy ANN Willson, et al.

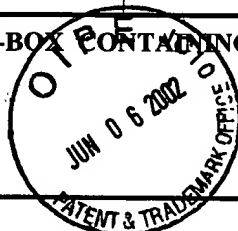
Serial No.  
09/868,813

Filing Date  
June 21, 2001

Examiner  
Unassigned

Group Art Unit  
Unassigned

Title: SOCS-BOX CONTAINING PEPTIDES



Address to:

Assistant Commissioner for Patents  
Washington, D.C. 20231

**37 CFR 1.97(b)**

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application; within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or before the mailing date of a first Office Action on the merits, whichever event occurs last.

**37 CFR 1.97(c)**

2. ☐ The Information Disclosure Statement submitted herewith is being filed after three months of the filing of a national application, or the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or after the mailing date of a first Office Action on the merits, whichever occurred last but before the mailing date of either:

1. a Final Action under 37 CFR 1.113, or
  2. a Notice of Allowance under 37 CFR 1.311,
- whichever occurs first.

Also submitted herewith is:

- ☐ a certification as specified in 37 CFR 1.97(e);

**OR**

- ☐ the fee set forth in 37 CFR 1.17(p) for submission of an Information Disclosure Statement under 37 CFR 1.97(c).